

1997 New York State IPM Demonstration Proposal

Use of Reflective Mulch to Reduce Thrips Populations in Field-Grown Cut Flowers

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BACKGROUND AND OBJECTIVES

Production of field-grown cut flowers represents an expanding area of agricultural production. It is often undertaken by fruit or vegetable growers as a way to expand and diversify their businesses, and is also used by individuals looking for a way to start a new business.

A common insect problem encountered in cut flower production is thrips. They injure plants directly by their feeding, and indirectly by the transmission of impatiens necrotic spot virus and tomato spotted wilt virus. Western flower thrips is considered to be the most important thrips vector. Once plants are infected with either virus they must be destroyed. Nine of the ten most profitable cut flower species (3) are susceptible to these viruses, as are many other popular cut flower species such as dahlia and aster.

While reflective mulch has been used for many years to reduce aphid populations in vegetable crops, its ability to have the same effect on thrips has only recently been studied. Reflective mulch has been demonstrated to reduce thrips populations in field-grown tomatoes (2, 4, 5), and reflective tape and fabric have been used to deter thrips entry into greenhouses (1). The objective of this project is to demonstrate the use of reflective mulch as a method to reduce thrips populations in field-grown cut flowers.

For a printed copy of the entire report, please contact the NYS IPM office at:

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